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Purpose

The purpose of this Health and Safety Plan (HASP) is to define the health and safety-related planning process, requirements, and procedures to be used for the safe and compliant execution of work conducted under the Program Management Contract (PMC) at the Rocky Mountain Arsenal (RMA).

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ACRONYMS

ACGIH American Conference of Governmental Industrial Hygienists

ACM Asbestos-Containing Material **Activity Hazard Analysis** AHA APR Air Purifying Respirators Commercial Driver's License CDL **CFR** Code of Federal Regulations CPR Cardiopulmonary Resuscitation CRA Central Remediation Area Contamination Reduction Zone CRZ **CWM** Chemical Warfare Materiel

dBA Decibels, A Scale

EHSSC Environmental Health and Safety Steering Committee

EPA U.S. Environmental Protection Agency ESQ Environmental Safety and Quality

EZ Exclusion Zone

FCR Field Change Request
FES Fire and Emergency Services
FFA Federal Facility Agreement

FWENC Foster Wheeler Environmental Corporation

HASP Health and Safety Plan

HPS Hantavirus Pulmonary Syndrome
HSS Health and Safety Supervisor
HWL Hazardous Waste Landfill
ICP Integrated Contingency Plan
IRA Interim Response Action
MSDS Material Safety Data Sheet

NIOSH National Institute for Occupational Safety and Health

OE Ordnance/Explosives

OSHA Occupational Safety and Health Administration

PEL Permissible Exposure Limit

PMC Program Management Contract(or)
PPE Personal Protective Equipment
RCWM Recovered Chemical Warfare Materiel

RMA Rocky Mountain Arsenal ROD Record of Decision

RVO Remediation Venture Office

SLM Sound Level Meter

SQI Submerged Quench Incinerator

SZ Support Zone

TLV Threshold Limit Value

TSD Treatment, Storage and Disposal

TWA Time-Weighted Average USFWS U.S. Fish and Wildlife Service

UXO Unexploded Ordnance

VPP Voluntary Protection Program(s)
WBGT Wet Bulb Globe Temperature
ZIP Zero Incident Performance

1.0 INTRODUCTION

1.1 Purpose

The purpose of this Health and Safety Plan (HASP) is to define the health and safety-related planning process, requirements, and procedures to be used for the safe and compliant execution of work conducted under the Program Management Contract (PMC) at the Rocky Mountain Arsenal (RMA).

1.2 Scope

This HASP covers activities conducted under the PMC, including site support operations, clean construction work and activities that fall under the scope of the Occupational Safety and Health Administration (OSHA) Standards for Hazardous Waste Operations and Emergency Response, Title 29 Code of Federal Regulations (CFR) 1910.120 and 29 CFR 1926.65.

The PMC, PMC Subcontractors, and their lower-tier subcontractors are responsible for implementing the Record of Decision (ROD) (FWENC 1996) regarding the selected remedial actions for the On-Post Operable Unit at RMA. Work includes execution of remedial implementation projects described in the Site-Wide Implementation Plan and other projects as identified by the Remediation Venture Office (RVO). Typical operations include demolition of structures, excavation and movement of soils, water treatment facility construction and operation, landfill construction and waste placement, other remedial actions, construction projects, and site support operations necessary to facilitate transition of the site to a National Wildlife Refuge.

The HASP applies to all personnel who wish to gain access to active field worksites managed by the PMC, including, but not limited to, the following:

- PMC employees (Foster Wheeler Environmental Corporation [FWENC], Brown and Root Services, Golder Associates, Enscicon, and Hellmund Association) PMC Subcontractors and lower-tier subcontractors
- RVO employees, representatives, and subcontractors
- Federal, state, or local government or community representatives

In general, all sections of this HASP are applicable to field work and site support operations, unless a specific exemption is made and worker safety is maintained. Specific exemptions are made in the Subcontractor Health and Safety Requirements section of subcontracts, the task-specific HASP process (Section 4), or as authorized by the PMC Health and Safety Manager or Supervisor.

1.3 Approach to Safety

The PMC safety culture begins with *Zero Incident Performance* (ZIP) as an expectation and promotes continuous improvement in safety performance. ZIP means error-free, incident-free project execution: no injuries, illnesses, property damage, or adverse community or environmental impacts. ZIP does not happen by chance—it is achieved through the integration of safety into all management systems, the project process, and by individual effort. It is the PMC's belief that all incidents are preventable.

Loss control management principles provide the framework for integrating our safety culture and values into the execution of our work. Health and safety programs, plans, and procedures define the applicable safety requirements and clearly specify the performance and behavior expected from each PMC and PMC Subcontractor employee. Training is provided and/or required to ensure an understanding of the requirements. Communications, awareness, and recognition reinforce the training effort and provide motivation for the achievement of safety excellence. Monitoring and evaluation of PMC and PMC Subcontractor safety performance provides

feedback on the effectiveness of the overall safety program and results in continuous safety program improvement through implementation of lessons learned.

This programmatic approach to safety establishes a work environment in which safety is a prerequisite and employee work practices reflect the RVO/PMC safety culture.

1.4 Voluntary Protection Program

The PMC and PMC Subcontractors (including lower-tier subcontractors) shall implement and maintain a safety program onsite consistent with the OSHA Voluntary Protection Program (VPP) requirements and guidelines. It is recognized that safety programs which go beyond mere compliance with OSHA standards achieve better safety performance and fewer worker injuries or illnesses, and save money. The health and safety management system described and required by the PMC HASP is intended to fulfill OSHA VPP program standards. Specifically, PMC and PMC Subcontractor safety programs shall, at a minimum, include the elements described below and elsewhere in this plan.

Management Commitment – On-site management, supervisors, and foremen show proactive, visible leadership for the safety program. This includes active involvement in safety meetings and safety inspections, including safety concern in the planning, budgeting, and scheduling process, and recognizing or rewarding employees for participation in safety programs and practicing safe work behaviors.

Employee Involvement – At least three meaningful avenues for employee involvement in the safety program are provided onsite including, as a minimum, involvement in: 1) safety meetings (daily or periodic, and the monthly subcontractor safety meeting), 2) safety inspections (periodic, weekly, and/or monthly), and 3) participation in the Safety Observer program. Additional avenues for employee involvement are encouraged such as employee development or review of the task-specific HASP and AHAs, participation in incident reporting and investigation, development and presentation of safety training, participation in the ZIP SLIP program, providing input to the Environmental Health and Safety Steering Committee (EHSSC), and participation in project or department safety committees.

Worksite Analysis – A worksite analysis program shall be developed and maintained including safety inspections, participation in periodic health and safety reviews, surveillances and audits, worksite monitoring (physical, chemical and biological hazards), tracking and trending of incidents and corrective actions, and provision of adequate, qualified health and safety resources for the work.

Hazard Prevention and Control – A worksite free of recognized hazards must be maintained. Work shall be planned to prevent or eliminate hazards where feasible. Adequate resources must be provided to control hazards using the following hierarchy, engineering controls, work practice or administrative controls, and lastly Personal Protective Equipment (PPE). Adequate resources must be available to abate potential hazards in a timely manner.

Safety and Health Training – A complete safety and health training program shall be implemented and maintained to meet regulatory requirements and ensure that employees are adequately trained to perform work safely. Employees shall be trained to applicable plans and procedures and be aware of the health and safety hazards of the work, signs and symptoms of overexposure, and ways to protect themselves from workplace hazards. Additionally, employees shall be apprised of their rights and responsibilities under the Occupational Safety and Health Act.

A summary of the on-site VPP suitable for posting and training employees is provided in Figure 1-1. Additional information on VPP is available from the PMC Health and Safety staff and at the website http://osha.gov/oshprogs/vpp/.

1.5 Applicable Requirements

The PMC and each PMC Subcontractor shall comply with applicable portions of the following codes, regulations, and standards when performing work at RMA:

- Public Law 91-596, Occupational Safety and Health Act of 1970, Section 5(a)(1), "General Duty Clause"
- 29 CFR 1910, General Industry Safety and Health Standards
- 29 CFR 1926, Construction Industry Safety and Health Standards
- 29 CFR 1904, Recording and Reporting Occupational Injuries and Illnesses
- 49 CFR, Department of Transportation
- 10 CFR 834 and 10 CFR 835, Occupational Radiation Protection
- DOD STD 6055.9, Department of Defense Standard, Ammunition and Explosives Safety
- AR 385-64, Department of Army Regulation, Ammunition and Explosives Safety
- DA PAM 385-64, Department of Army Pamphlet, Ammunition and Explosives Safety Standards
- AR 50-6, Department of Army Regulation, Chemical Surety
- AR 385-61, Department of Army Regulation, Army Chemical Agent Safety Program
- DA PAM 385-61, Department of Army Pamphlet, Toxic Chemical Agent Safety Standards
- AMCR 385-100, Army Materiel Command Regulation, AMC Safety Manual
- National consensus standards (most recent version), incorporated by reference in 29 CFR 1910 and 29 CFR 1926, in particular, American National Standards Institute Standards, National Electric Code, and National Fire Protection Association (NFPA) Codes
- Other health and safety-related codes, standards, regulations, and requirements as directed by the RVO or PMC